

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| | | |
|--|---|----------|
| THE APPLICATION OF BEAVER-ELKHORN WATER |) | |
| DISTRICT FOR (1) CERTIFICATE OF PUBLIC |) | |
| CONVENIENCE AND NECESSITY - CONSTRUCTION - |) | |
| PHASE III WATER LINE EXTENSIONS PURSUANT |) | |
| TO KRS 278.020(1); (2) AUTHORIZATION OF |) | |
| BORROWING FROM THE COMMONWEALTH OF |) | |
| KENTUCKY, KENTUCKY INFRASTRUCTURE |) | CASE NO. |
| AUTHORITY WATER RESOURCES LOAN FUND - |) | 95-200 |
| PHASE III PURSUANT TO KRS 278.300 AND |) | |
| GRANT OF \$600,000 AND FROM ABANDONED |) | |
| MINE LAND - \$540,000; (3) AUTHORITY TO |) | |
| INCREASE RATES PURSUANT TO 807 KAR 5:001, |) | |
| SECTION 10; AND (4) APPROVAL OF REVISED |) | |
| TARIFF |) | |

O R D E R

Beaver-Elkhorn Water District ("Beaver-Elkhorn") filed its application on June 13, 1995 for a Certificate of Public Convenience and Necessity to construct a waterworks improvement project, for approval of financing, and for an adjustment to its retail rates. Commission Staff, having performed a limited financial review of Beaver-Elkhorn's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 15 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 15 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or

informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 7th day of December, 1995.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BEAVER-ELKHORN WATER)
DISTRICT FOR (1) CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY - CONSTRUCTION -)
PHASE III WATER LINE EXTENSIONS PURSUANT TO)
KRS 278.010 (1); (2) AUTHORIZATION OF)
BORROWING FROM THE COMMONWEALTH OF KENTUCKY,)
KENTUCKY INFRASTRUCTURE AUTHORITY WATER) CASE NO. 95-200
RESOURCES LOAN FUND - PHASE III PURSUANT TO)
KRS 278.300 AND GRANT OF \$600,000 AND FROM)
ABANDONED MINE LAND - \$540,000;)
(3) AUTHORITY TO INCREASE RATES PURSUANT TO)
807 KAR 5:001; SECTION 10; AND (4) APPROVAL)
OF REVISED TARIFF)

STAFF REPORT

Prepared By: Mark C. Frost
Public Utility Financial
Analyst, Chief
Water and Sewer Revenue
Requirements Branch
Financial Analysis Division

Prepared By: John Geoghegan
Public Utility Rate
Analyst, Chief
Communications, Water
and Sewer Rate Design Branch
Rates and Research Division

STAFF REPORT

ON

BEAVER-ELKHORN WATER DISTRICT

CASE NO. 95-200

Beaver-Elkhorn Water District ("Beaver-Elkhorn") submitted its application on May 1, 1995 for a Certificate of Convenience and Necessity ("Certificate") to construct a \$4,349,011 waterworks improvement project, for approval of financing, and for an increase in rates. However, the application was not considered filed until June 13, 1995. The Commission issued an Interim Order on September 15, 1995 granting the Certificate and approving the proposed plan of financing.

In Order to evaluate the requested increase, the Commission Staff ("Staff") performed a limited financial review of Beaver-Elkhorn's test period operations for the 12 month period ending February 28, 1995. The scope of the review was limited to obtaining information as to whether the test-period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

Mark Frost of the Commission's Division of Financial Analysis performed the limited review on September 27, 1995 and October 4, 1995. Mr. Frost is responsible for the preparation of this Staff Report except for the determination of normalized Revenue from Water Sales, Rate Design, and Attachment D, which were prepared by John Geoghegan of the Commission's Division of Rates and Research.

A comparison of Beaver-Elkhorn's actual and pro forma operations is shown in Attachment A. Based upon Staff's recommendations, Beaver-Elkhorn's operating statement would appear as set forth in Attachment B.

Beaver-Elkhorn originally estimated that its Phase III construction project would extend service to 989 new customers. Using this estimate, Beaver-Elkhorn arrived at its normalized revenue from rates of \$913,590.

However, when the Phase III construction bids were received, the scope of the project was cut, which resulted in a decrease to the number of new customers from 989 to 747. This decrease in new customers coupled with the outcome of Staff's billing analysis resulted in normalized revenue from rates of \$838,802, a decrease of \$74,788 from Beaver-Elkhorn's estimate.

Using its normalized revenue from rates of \$913,590, Beaver-Elkhorn determined that its pro forma operations support a revenue requirement of \$1,058,842, an increase in its revenues from rates of \$119,370, as presented in Attachment C. As shown in that same Attachment, Staff's recommended operations, which includes normalized revenue from rates of \$838,802, result in a total revenue requirement of \$1,048,073, an increase in revenue from rates of \$183,389.

Staff's recommended increase is \$64,019 greater than the increase requested by Beaver-Elkhorn. This disparity can be

attributed to the differences between normalized revenues and total revenue requirements.¹

The rates contained in Attachment D will achieve Staff's recommended level of revenue from rates of \$1,022,191.² Although the rates recommended by Staff are higher than those proposed by Beaver-Elkhorn, the increase was necessary because Phase III will have 242 less customers than Beaver-Elkhorn originally anticipated, resulting in less revenue from the project.

Signatures

Mark C. Frost
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Public Utility Financial
Analyst, Chief
Water and Sewer Revenue
Requirements Branch
Financial Analysis Division

John Geoghegan
Prepared By: John Geoghegan
Public Utility Rate
Analyst, Chief
Communications, Water and
Sewer Rate Design Branch
Rates and Research Division

| | | |
|--------------|---------------------------------------|---------------------|
| ¹ | Normalized Revenue Difference | \$ 74,788 |
| | Total Revenue Requirement Difference: | |
| | \$1,048,073 - \$1,058,842 = | - 10,769 |
| | Net Difference | <u>\$ 64,019</u> |
| ² | Total Revenue Requirement | \$ 1,048,073 |
| | Less: Other Operating Revenue | 19,922 |
| | Interest Income | - 5,960 |
| | Revenue Requirement from Rates | <u>\$ 1,022,191</u> |

**ATTACHMENT A
STAFF REPORT CASE NO. 95-200
BEAVER-ELKHORN'S REQUESTED OPERATIONS**

| | Actual Test Period Operations | Pro Forma Adjustments | Foot- note Ref. | Pro Forma Operations |
|--|-------------------------------------|--------------------------|-----------------------|-------------------------|
| Operating Revenues: | | | | |
| Water Sales | \$643,072 | \$270,518 | | \$913,590 |
| Service Fees & Penalties | 17,730 | 0 | | 17,730 |
| Sprinklers | 1,298 | 0 | | 1,298 |
| Miscellaneous Income | 894 | 0 | | 894 |
| Interest Income | 5,960 | 0 | | 5,960 |
| Total Operating Revenues | \$668,954 | \$270,518 | | \$939,472 |
| Operating Expenses: | | | | |
| Operations Labor - Pumping | \$59,191 | \$0 | | \$59,191 |
| Fuel for Power Production | 3,532 | 0 | | 3,532 |
| Fuel for Power Pumping | 38,050 | 0 | | 38,050 |
| Operational Supplies & Exp - Pumping | 11,324 | 0 | | 11,324 |
| Chemicals | 22,615 | 0 | | 22,615 |
| Operational Supplies & Exp.- Water Treat. | 2,953 | 0 | | 2,953 |
| Operations Labor - Trans. & Dist. | 113,624 | 0 | | 113,624 |
| Operational Supplies & Exp. - Trans. & Dist. | 35,952 | 28,500 | | 64,452 |
| Maintenance of Meters | 46 | 0 | | 46 |
| Operational Supplies & Exp. - Cust. Accounts | 15,123 | 0 | | 15,123 |
| Uncollectible Accounts | 2,353 | 0 | | 2,353 |
| Operations Labor - Admin. & Gen. | 22,865 | 5,400 | | 28,265 |
| Operational Supplies & Exp - Admin. & Gen. | 11,582 | 0 | | 11,582 |
| Outside Services | 30,580 | 0 | | 30,580 |
| Property Insurance | 8,479 | 0 | | 8,479 |
| Employee Pensions & Benefits | 64,941 | 0 | | 64,941 |
| Regulatory Commission Expense | 2,250 | 4,376 | | 6,626 |
| Misc. & Commissioner Fees | 5,799 | 0 | | 5,798 |
| Transportation | 83 | 0 | | 83 |
| Depreciation | 137,905 | 79,758 | | 217,661 |
| Payroll & Other Taxes | 16,380 | 0 | | 16,380 |
| Total Operating Expenses | \$803,626 | \$118,032 | | \$721,658 |
| Net Operating Income | \$65,328 | \$152,486 | | \$217,814 |
| Other Deductions: | | | | |
| Long-Term Interest Expense | 24,249 | (24,249) | | 0 |
| Other Interest Expense | 374 | (374) | | 0 |
| Net Income | \$40,705 | \$177,109 | | \$217,814 |

ATTACHMENT B
STAFF REPORT CASE NO. 95-200
STAFF'S RECOMMENDED PRO FORMA OPERATIONS

| | Actual Test Period Operations | Pro Forma Adjustments | Foot- note Ref. | Pro Forma Operations |
|--|-------------------------------------|--------------------------|-----------------------|-------------------------|
| Operating Revenues: | | | | |
| Revenue from Water Sales | \$643,072 | \$195,730 | A | \$838,802 |
| Service Fees & Penalties | 17,730 | 0 | | 17,730 |
| Sprinklers | 1,298 | 0 | | 1,298 |
| Miscellaneous Income | 594 | 0 | | 594 |
| Total Operating Revenues | \$662,694 | \$195,730 | | \$858,424 |
| Operating Expenses: | | | | |
| Salaries & Wages-Employees | \$195,660 | \$6,304 | B | \$201,964 |
| Employee Pensions & Benefits | 64,941 | (8,799) | C | 56,142 |
| Purchased Power | 39,562 | 7,611 | D | 47,173 |
| Operational Supplies & Exp. | 76,934 | (24,114) | E | 52,820 |
| Chemicals | 22,615 | (4,125) | F | 18,490 |
| Maintenance of Meters | 46 | 0 | | 46 |
| Uncollectible Accounts | 2,353 | 0 | | 2,353 |
| Outside Services | 30,560 | 0 | | 30,560 |
| Ins. - Property | 8,479 | (656) | G | 7,823 |
| Ins. - Workers Compensation | 0 | 10,903 | H | 10,903 |
| Regulatory Commission Expense | 2,250 | (1,234) | I | 1,016 |
| Misc. & Commissioner Fees | 3,798 | (634) | J | 3,164 |
| Transportation | 83 | 0 | | 83 |
| Depreciation | 137,905 | 130,664 | K | 268,569 |
| Amortization | 0 | 211 | L | 211 |
| Payroll & Other Taxes | 16,360 | 482 | M | 16,842 |
| Total Operating Expenses | \$603,826 | \$116,633 | | \$720,459 |
| Net Operating Income | \$59,368 | \$78,897 | | \$138,265 |
| Nonutility Income: | | | | |
| Interest Income | 5,960 | 0 | | 5,960 |
| Net Income Available for Debt Service | \$65,328 | \$78,897 | | \$144,225 |

A. Revenue from Water Sales:

On September 15, 1995, the Commission issued an Order approving Beaver-Elkhorn's proposed plant expansion to provide water service to an additional 747 customers. Staff's billing analysis reflects the test period water sales, the additional 747 customers, and Beaver-Elkhorn's current tariffed rate on file with the Commission.

| Increment | Bills | Gallons | 1,000 | 19,000 | 30,000 | 50,000 |
|-------------------|---------------|--------------------|-------------------|--------------------|-------------------|------------------|
| First 1,000 Ga | 4,524 | 2,399,000 | 2,399,000 | | | |
| Next 19,000 Gal | 28,732 | 143,193,000 | 28,732,000 | 118,461,000 | | |
| Next 30,000 Gal | 404 | 12,232,000 | 404,000 | 7,676,000 | 4,152,000 | |
| Next 50,000 Gal | 128 | 9,271,000 | 128,000 | 2,432,000 | 3,840,000 | 2,871,000 |
| Over 100,000 Gal. | 139 | 37,659,000 | 139,000 | 2,641,000 | 4,170,000 | 6,950,000 |
| Totals | 31,927 | 204,754,000 | 29,802,000 | 129,210,000 | 12,162,000 | 9,821,000 |

| Increment | Bills | Gallons | Rate | Revenue |
|-----------------------|-----------|-------------------|---------------|------------------|
| First 1,000 Ga | 31,927 | 29,802,000 | \$12.49 | \$398,768 |
| Next 19,000 Gal | | 129,210,000 | \$2.24 | 289,430 |
| Next 30,000 Gal | | 12,162,000 | \$2.05 | 24,932 |
| Next 50,000 Gal | | 9,821,000 | \$1.73 | 16,990 |
| Over 100,000 Gal. | | 23,759,000 | \$1.54 | 36,589 |
| Subtotal | | | | \$768,709 |
| Wholesale | 60 | 44,109,000 | \$1.54 | 67,928 |
| Uncollectibles | | | | 4,165 |

Normalized Revenues from Rates
Reported Revenues from Rates

\$838,802
643,072

Staff's Recommended Adjustment

\$195,730

B. Salaries & Wages - Employees:

Beaver-Elkhorn informed Staff that it did not intend to hire any new employees as a result of its expansion. Therefore, Staff's recommended pro forma salaries & wages - employees expense is based on the current employee level, the number of hours each employee worked in the test period, and the 1995 pay rates. Because of the lack of supporting documentation, Staff did not include additional employees or increased overtime hours that might result from Beaver-Elkhorn's expansion.

| | Pro Forma Salaries |
|--------------------------------------|-----------------------|
| Pumping Plant | \$63,418 |
| Transmission & Distribution: | 105,109 |
| Office | 33,457 |
| Pro Forma Salaries & Wages-Employees | \$201,984 |
| Reported Salaries & Wages-Employees | 195,680 |
| Staff's Recommended Adjustment | \$6,304 |

C. Employee Pension & Benefits:

This adjustment reflects Beaver-Elkhorn's 1995 health insurance premiums.

| | Health Ins. Sep '95 Prem. | Life & AD&D Sep '95 Fee | Monthly Sep '95 Prem | Annual Premiums |
|--------------------------------|------------------------------|----------------------------|-------------------------|--------------------|
| Pumping Plant | \$1,533 | \$24 | \$1,557 | \$18,684 |
| Transmission & Dist. | \$2,403 | \$40 | \$2,443 | 29,310 |
| Office | \$663 | \$16 | \$679 | 8,148 |
| Pro Forma Health Ins. Premium | | | | \$56,142 |
| Reported Health Ins. Premium | | | | 64,941 |
| Staff's Recommended Adjustment | | | | (\$8,799) |

D. Purchased Power:

Beaver Elkhorn's test period line loss was 43.1 percent, which exceeds the allowable limit of 15 percent established by this Commission. When informed of the Commission's line loss limitation, Beaver-Elkhorn told Staff that it is taking the following corrective actions to lower its line loss: (1) Replacing a large section of main from Allen to Martin; (2) Monitoring all water used by local fire departments; and (3) Keeping better records of all service and main line leaks. Staff review of the four previous annual reports reveals that excessive line loss is a historical problem Beaver-Elkhorn has been unable to control. Staff has adjusted the actual purchased power expense to recognize customer growth and the 15 percent line loss limitation on Beaver-Elkhorn's water production costs.

| Service To: | Treatment Plant | | | Trans & Dist | Office |
|-------------|-------------------|--------------------|-------------|-------------------|-------------------|
| | Electric Ky Power | Electric Big Sandy | Gas East Ky | Electric Ky Power | Electric Ky Power |
| Mar-94 | \$2,540 | \$298 | \$302 | \$1,299 | \$117 |
| Apr-94 | 2,692 | 330 | 126 | 1,372 | 85 |
| May-94 | 2,594 | 316 | 72 | 1,213 | 65 |
| Jun-94 | 2,680 | 340 | 49 | 1,025 | 57 |
| Jul-94 | 2,802 | 366 | 41 | 989 | 67 |
| Aug-94 | 2,999 | 324 | 72 | 1,051 | 67 |
| Sep-94 | 1,468 | 244 | 72 | 1,091 | 52 |
| Oct-94 | 3,130 | 282 | 80 | 1,038 | 50 |
| Nov-94 | 2,276 | 264 | 114 | 1,233 | 68 |
| Dec-94 | 3,935 | 245 | 251 | 1,250 | 87 |
| Jan-95 | 3,500 | 251 | 236 | 1,179 | 151 |
| Feb-95 | 3,141 | 281 | 280 | 1,180 | 192 |
| Totals | \$33,737 | \$3,541 | \$1,692 | \$13,920 | \$1,058 |

| | |
|---|----------|
| Test Period Treatment Plant - Electric | \$37,278 |
| Divided by: Test Period Gallons Produced in Thousands | 359,520 |
| Electric Cost Per 1,000 Gallons | \$0.104 |
| Test Period Water Sales in 1,000 Gallons | 204,643 |
| Water Sales to New Customers in 1,000 Gallons | 44,820 |
| Pro Forma Water Sales in 1,000 Gallons | 249,463 |
| Divided by: 85% Allowable Water Production | 85% |
| Pro Forma Water Production in 1,000 Gallons | 293,486 |
| Multiplied by: Electric Cost Per 1,000 Gallons | \$0.104 |
| Pro Forma Treatment Plant - Electric | \$30,523 |
| Gas | 1,692 |
| Electric | 14,978 |
| Pro Forma Purchased Power | \$47,193 |
| Reported Purchased Power | 39,582 |
| Staff's Recommended Adjustment | \$7,611 |

E. Operational Supplies & Exp:

This adjustment reflects: (1) Misclassified electric and gas payments have been removed and included in the determination of pro forma purchased power expense; (2) Payments to Porter Industries were for a pump station that was capitalized in the test period. Because accounts payable installments are not considered an operating expense, payments made to Porter Industries have been removed; (3) In 1995 Beaver-Elkhorn purchased a computer program and began to perform its customer billing in-house. Therefore, payments made to Computer & Utility Service have been eliminated. (4) Postage expense has been adjusted to reflect the pro forma level of customers and the current postage rate. (5) At the end of 1995, Beaver-Elkhorn moved into a new office. Rent expense has been adjusted to reflect Beaver-Elkhorn's increased rent of \$700 per month.

| | | | |
|--|---------|--|------------|
| 1) Electric & Gas: | | | (\$17,017) |
| 2) Porter - Payments on Account for Pump Station | | | (3,000) |
| 3) Computer & Utility Service | | | (10,725) |
| 4) Postage: | | | |
| Pro Forma # of Bills | 32,244 | | |
| Current Postage Rate | \$0.19 | | |
| | | | |
| Pro Forma Postage Expense | \$6,126 | | |
| Reported Postage Expense | 4,448 | | |
| | | | |
| Postage Expense Adjustment | | | 1,678 |
| 5) Office Rent: | | | |
| Monthly Rent | \$700 | | |
| Multiplied by: 12 Months | 12 | | |
| | | | |
| Pro Forma Rent | \$8,400 | | |
| Reported Office Rent | 3,450 | | |
| | | | |
| Office Rent Adjustment | | | 4,950 |
| Staff's Recommended Adjustment | | | (\$24,114) |

F. Chemicals:

Staff has adjusted the chemical expense to recognize customer growth and the 15 percent limitation on Beaver-Elkhorn's water production costs.

| | | |
|--|----------|-----------|
| Test Period Chemical Cost | 22,615 | |
| Divided by: Test Period Gallons Produced in 1,000 Gallons | 359,520 | |
| | | |
| Chemical Cost Per 1,000 Gallons | \$0.063 | |
| Multiplied by: Pro Forma Water Production in 1,000 Gallons | 293,486 | |
| | | |
| Pro Forma Chemical Expense | \$18,490 | |
| Reported Chemical Expense | 22,615 | |
| | | |
| Staff's Recommended Adjustment | | (\$4,125) |

G. Ins. - Property

This adjustment is based on Staff's analysis of Beaver-Elkhorn's 1995 insurance premiums.

| | | | |
|--------------------------------|-----------------|------------|---------|
| Walter P. Walters Eff. 3/25/95 | Multi Peril | CPP1164357 | \$4,663 |
| Walter P. Walters Eff. 3/25/95 | Com. Automobile | CBA1164357 | 2,956 |
| Commissioners Bond | | | 204 |
| | | | ----- |
| Current Insurance Premiums | | | \$7,823 |
| Reported Ins - Property | | | 8,479 |
| | | | ----- |
| Staff's Recommended Adjustment | | | (\$656) |
| | | | ----- |

H. Ins. - Workers Compensation:

This adjustment reflects Beaver-Elkhorn's current workers' compensation premiums and pro forma labor expense.

| | Pro Forma Payroll | Rate per \$100 | Pro Forma Premium |
|---------------------------------|----------------------|-------------------|----------------------|
| | ----- | | ----- |
| Waterworks Operation & Drivers | \$168,527 | \$6.85 | \$11,544 |
| Clerical Office Employees | \$33,457 | \$0.50 | 167 |
| | | | ----- |
| Premium Subject to Modification | | | \$11,711 |
| Experiences Modification Factor | | | 86% |
| | | | ----- |
| Pro Forma Standard Premium | | | \$10,071 |
| Premium Discount 2.7% | | | 272 |
| Expense Constant | | | 140 |
| | | | ----- |
| Pro Forma Annual Premium | | | \$9,939 |
| Assessment | 9,939 | x 9.7% = | 964 |
| | | | ----- |
| Pro Forma Workers' Comp Premium | | | \$10,903 |
| | | | ----- |

I. Regulatory Commission Expense:

Beaver-Elkhorn is seeking to amortize accounting fees of \$19,878 incurred in Case No. 92-129 over a 3 year period. The fees were paid in the year incurred, and therefore have already been recovered from Beaver-Elkhorn's customers. While Beaver-Elkhorn will require the services of its accountant in the future, it is highly unlikely that Beaver-Elkhorn will pay accounting fees of this magnitude on a recurring basis; the accounting fees paid to date in this proceeding are \$3,049. Furthermore, allowing Beaver-Elkhorn to recover the cost of Case No. 92-129 from its current and future customers would constitute retroactive rate-making. For these reasons, amortization of the cost of Case No. 92-129 is not included in pro forma operations. However, the cost of this case has been amortized over 3 years.

| | |
|---|-----------|
| Cost of Current Rate Case - Accounting Fee | \$3,049 |
| Divided by: Recommended Period | 3 |
| | ----- |
| Amortization Expense - Current Rate Case | \$1,016 |
| Reported Amortization Expense - Case No. 92-129 | 2,250 |
| | ----- |
| Staff's Recommended Adjustment | (\$1,234) |
| | ----- |

- J. Misc. & Commissioner Fees:
Non-recurring costs have been removed from test period operations and amortized.

Advertisements for Bids - Floyd County Newspapers

(**\$634**)

K. Depreciation:

This adjustment reflects: (1) In this current case, Beaver-Elkhorn has been granted a Certificate to extend its distribution system. Since revenues and expenses recommended herein have been adjusted to reflect the additional customers related to the distribution system expansion, depreciation expense has likewise been adjusted; and (2) Beaver-Elkhorn's on-going level of depreciation expense from the 1995 depreciation schedule included in the application.

| | |
|---|-------------|
| Phase III Water Line Extension Cost | \$4,349,011 |
| Divided by: Estimate Useful Life In Years | 50 |
| Pro Forma Depreciation Expense - Phase III | \$86,980 |
| Add: Depreciation Expense per 1995 Schedule | 181,809 |
| Pro Forma Depreciation Expense | \$268,789 |
| Less: Test Period Depreciation Expense | 137,905 |
| Staff's Recommended Adjustment | \$130,884 |

L. Amortization:

This adjustment reflects amortizing the cost to place the newspaper advertisements over a 3 year period to coincide with the rate case amortization.

| | Cost of Advertisements | Amortization Period | Amortization Expense |
|--------------------------|---------------------------|------------------------|-------------------------|
| Newspaper Advertisements | \$634 | 3 | \$211 |

M. Payroll Taxes:

This adjustment reflects the additional FICA expense that will result from the increase to Beaver-Elkhorn's operations labor expense.

| | |
|--|---------|
| Pro Forma Salaries & Wages - Emp. Adj. | \$6,304 |
| Multiplied by: Current FICA Rate | 7.65% |
| Staff's Recommended Adjustment | \$482 |

ATTACHMENT C
STAFF REPORT CASE NO. 95-200
COMPARISON OF THE REVENUE REQUIREMENTS

Beaver-Elkhorn's Revenue Requirement:

Debt Service:

First Guaranty National Bank

\$60,000

Kentucky Infrastructure Authority:

Phase I & II

71,809

Phase III

149,178

Total Annual Debt Service

\$280,987

Multiplied by: Requested Coverage

1.2

Requested Debt Service Coverage Amount

\$337,184

Add: Adjusted Operating Expenses

721,658

Required Revenue

\$1,058,842

Less: Adjusted Revenues

939,472

Requested Increase

\$119,370

Staff's Revenue Requirement:

Debt Service:

First Guaranty National Bank

\$60,000

Kentucky Infrastructure Authority:

Phase I & II

69,218 *

Phase III

143,798 *

Total Debt Service

\$273,012

Multiplied by: 1.2 Coverage

1.2

Subtotal

\$327,614

Adjusted Operating Expenses

720,459

Revenue Requirement

\$1,048,073

Less: Adjusted Operating Revenue

858,724

Interest Income

5,960

Recommended Revenue Increase

\$183,389

* Staff's KIA debt service is from the principal and interest calculation contained on the Phase II and Phase III amortization schedules.

ATTACHMENT D

BILLING ANALYSIS - BEAVER ELKHORN WATER DISTRICT STAFF RECOMMENDED REVENUE

Recommended Rates

A limited cost of service study was performed on Beaver-Elkhorn. The study showed that, in order for Beaver-Elkhorn to recover its customer costs and the cost of providing 1,000 gallons of water, the last 3 rate increments should be increased by a higher percentage than the first rate increment. Since there is no considerable difference between providing water for the 30,000 and 50,000 gallon increments, they have been consolidated into one step.

USAGE TABLE

| <u>INCREMENT</u> | <u>BILLS</u> | <u>GALLONS</u> | <u>1,000</u> | <u>19,000</u> | <u>80,000</u> | <u>100,000</u> |
|------------------|---------------|--------------------|-------------------|--------------------|-------------------|-------------------|
| FIRST 1,000 | 4,524 | 2,399,000 | 2,399,000 | | | |
| NEXT 19,000 | 26,732 | 143,193,000 | 26,732,000 | 116,461,000 | | |
| NEXT 80,000 | 532 | 21,503,000 | 532,000 | 10,108,000 | 10,863,000 | |
| NEXT 100,000 | 139 | 37,659,000 | 139,000 | 2,641,000 | 11,120,000 | 23,759,000 |
| <u>TOTAL</u> | <u>31,927</u> | <u>204,754,000</u> | <u>29,802,000</u> | <u>129,210,000</u> | <u>21,983,000</u> | <u>23,759,000</u> |

REVENUE TABLE REVENUE BY RATE INCREMENT

| | <u>BILLS</u> | <u>GALLONS</u> | <u>RATE</u> | <u>REVENUE</u> |
|---------------------|--------------|------------------|-------------|--------------------|
| 1,000 | 31,927 | 29,802.0 | \$14.10 | \$450.171 |
| 19,000 | | 129,210.0 | 2.94 | 379,877 |
| 80,000 | | 21,983.0 | 2.57 | 56,496 |
| 100,000 | | 23,759.0 | 2.00 | 47,518 |
| <u>SUBTOTAL</u> | | <u>204,754.0</u> | | <u>\$934,062</u> |
| <u>WHOLESALE 60</u> | | <u>44,109.0</u> | <u>2.00</u> | <u>88,218</u> |
| <u>TOTAL</u> | | | | <u>\$1,022,280</u> |